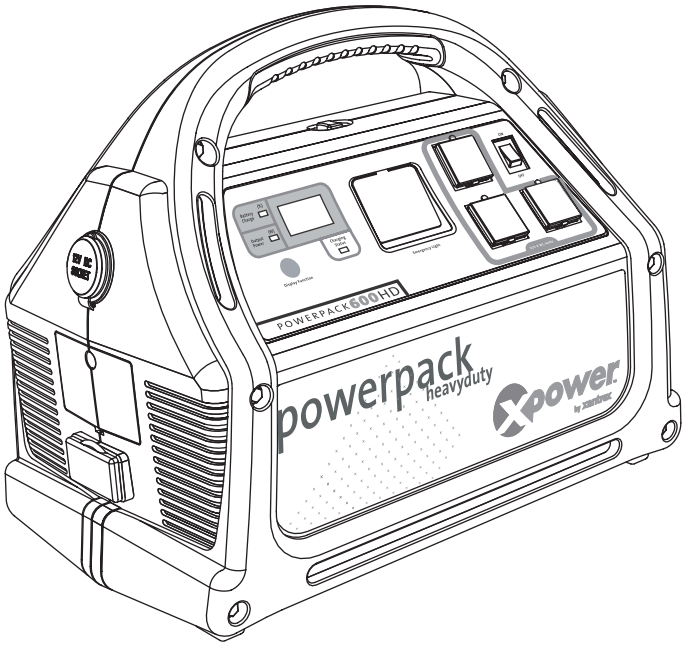
XPower Powerpack 600HD



Owner's Guide

XPower Powerpack 600HD

Owner's Guide

About Xantrex

Xantrex Technology Inc. is a world-leading supplier of advanced power electronics and controls with products from 50 watt mobile units to one MW utility-scale systems for wind, solar, batteries, fuel cells, microturbines, and backup power applications in both grid-connected and stand-alone systems. Xantrex products include inverters, battery chargers, programmable power supplies, and variable speed drives that convert, supply, control, clean, and distribute electrical power.

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About This Guide

Purpose

The purpose of this Owner's Guide is to provide explanations and procedures for installing, operating, maintaining, and troubleshooting the XPower Powerpack 600HD.

The Guide provides safety guidelines, detailed planning and setup information, as well as information about operating and troubleshooting the unit.

Conventions Used

The following conventions are used in this guide.

WARNING

Warnings identify conditions that could result in personal injury or loss of life.

CAUTION

Cautions identify conditions or practices that could result in damage to the product or to other equipment.

Important: These notes describe an important action item or an item that you must pay attention to.

Note: These notes describe additional information which may add to your understanding of how to use the product.

Related Information

You can find more information about Xantrex Technology Inc. as well as its products and services at **www.xantrex.com**.

Important Safety Instructions

The XPower Powerpack 600HD generates a type of AC power similar to a normal household wall outlet. Operating the XPower Powerpack incorrectly or misusing it may damage the equipment or create hazardous conditions for the user.

Important: Before using your XPower Powerpack, be sure to read and save these safety instructions.

Warnings and Cautions

WARNING: Shock hazard. Keep away from children.

The XPower Powerpack generates the same potentially lethal AC power as a normal household wall outlet. Do not insert foreign objects into the AC Outlet, the DC Power Socket, the Jump-Start Cable Port, or the ventilation holes. Do not expose this product to water, rain, snow, or spray.

CAUTION

Do not connect any AC appliance with the neutral conductor connected to ground to the XPower Powerpack.

CAUTION

Do not expose the XPower Powerpack to temperatures over 40 °C (104 °F).

WARNING: Explosion hazard

Do not use this product where there are flammable fumes or gases, such as in the bilge of a gasoline-powered boat, or near propane tanks. Do not use this product in an enclosure containing automotive-type lead acid batteries. These batteries, unlike the sealed AGM battery in XPower Powerpack, vent explosive hydrogen gas which can be ignited by sparks from electrical connections. When working on electrical equipment, always ensure someone is nearby to help you in an emergency.

WARNING: Heated surface

Ensure at least 2" (5 cm) air space is maintained on all sides of the XPower Powerpack. During operation, keep away from materials that may be affected by high temperatures such as blankets, pillows and sleeping bags.

WARNING: Fire hazard

Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard. Always disconnect the jump-start cables from the unit after use and clip the plastic guard over the jump-start cable port.

WARNING: Fire hazard

Jump-start cable clamps must be connected positive to positive (red clamp to battery "+") and negative to negative (black clamp to battery "–"). A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.

WARNING: Fire hazard

The jump-start feature is designed for short term operation only—less than 4 seconds. Operating the jump-start feature for more than 4 seconds may cause damage to the unit. Allow the XPower Powerpack to cool down for at least 3 minutes after each jump-start.

WARNING: Risk of explosion, fire or burns

The battery terminals exposed at the jump-start cable port have enough energy present to cause a spark, creating an explosion hazard, or to cause burns if a metal object contacts both terminals. Always clip the plastic guard over the port when not in use.

Precautions When Working With Batteries

WARNING: Explosion and fire hazard

1. Follow all instructions published by the battery manufacturer and the manufacturer of the equipment in which the battery is installed.
2. Make sure the area around the battery is well ventilated.
3. Never smoke or allow a spark or flame near the engine or batteries.
4. Be careful not to drop a metal object on the battery or allow a metal tool to simultaneously touch the positive and negative cable ends or battery terminals. It might spark or short-circuit the battery or other electrical parts and cause an explosion.
5. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery produces a short-circuit current high enough to weld a ring or other similar objects to metal, causing a severe burn.
6. If you need to remove a battery, always remove the positive terminal from the battery first. Make sure all accessories are off so you don’t cause an arc.
7. Someone should be within range of your voice, or close enough to come to your aid when you work near a lead-acid battery.
8. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, and eyes.
9. Wear complete eye protection and clothing protection. Avoid touching your eyes while working near batteries.

10. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters your eyes, immediately flood them with running cold water for at least twenty minutes and get medical attention immediately.
11. Keep a supply of baking soda on hand in the area of the batteries. Baking soda neutralizes lead-acid battery electrolyte.

Precautions for Using Rechargeable Appliances

CAUTION

The output of the inverter is non-sinusoidal.

Most rechargeable battery-operated equipment uses a separate charger or transformer that is plugged into an AC receptacle and produces a low voltage charging output.

Some chargers for rechargeable batteries can be damaged if connected to the XPower Powerpack.

Do not use the following with the XPower Powerpack:

- Small battery-operated appliances like flashlights, razors, and night lights that can be plugged directly into an AC receptacle to recharge.
- Some chargers for battery packs used in hand power tools. These chargers display a warning label stating that dangerous voltages are present at the battery terminals.

Note: If you are unsure about using your rechargeable appliance with the XPower Powerpack, contact the equipment manufacturer to determine the rechargeable appliance's compatibility with the modified sine wave (non-sinusoidal) AC waveform.

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1 Introduction

About the XPower Powerpack 600HD

Easy-to-use and designed for years of reliable service, the XPower Powerpack 600HD can run many AC appliances and 12 V DC appliances whenever you need power for work or play, at home or on the road.

The XPower Powerpack:

- Powers 115 V AC appliances
- Powers 12 V DC appliances
- Jump starts vehicle engines
- Provides lighting for emergency use

In addition, the XPower Powerpack is equipped with:

- AM/FM radio
- Digital alarm clock.

Comprehensive Protection

Automatic overload

The XPower Powerpack has built-in protection against output overload. If you connect to the AC outlet(s) an appliance that draws more than 480 W, or one which draws excessive surge power, the power to the AC outlet automatically shuts off.

Overheating

The XPower Powerpack is protected from overheating. If the inverter exceeds a safe temperature, power to the AC outlet automatically shuts off.

Low Battery Protection

Low battery protection protects the internal battery from excessive discharge and possible damage. When the AC outlet ON/OFF switch is turned on, an audible alarm alerts you when the internal battery is nearly discharged (11.0 V DC) and the unit turns off at 10.5 V DC.

Jump-Start Cables Safety Feature

The XPower Powerpack comes with a user-replaceable 250 A fuse to protect the unit and vehicle battery from damage through reverse polarity and short-circuit conditions.

2 Features

Chapter 2 describes the main features of the XPower Powerpack 600HD. We recommend that you familiarize yourself with these features before operating the unit.

Materials List

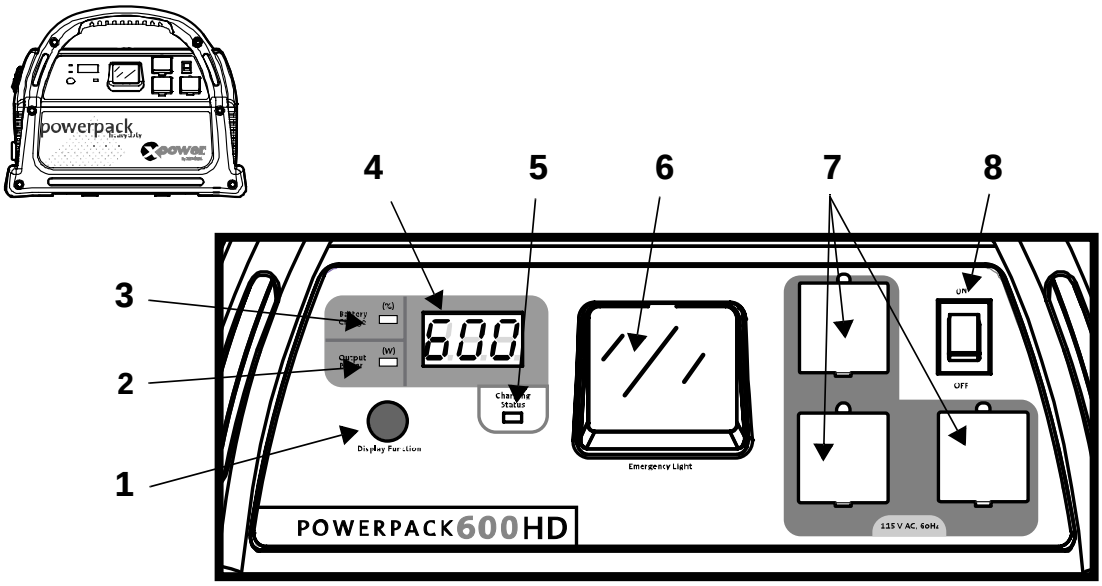
Your XPower Powerpack package includes these items:

- ❒ XPower Powerpack
- ❒ Owner's Guide
- ❒ AC charger
- ❒ DC charging cable
- ❒ Jump-start cables
- ❒ Accessory bag

If any of these materials are missing or are unsatisfactory in any way, please contact Customer Service (see page 43).

XPower Powerpack 600HD Features

Front Panel Detail



Front Panel Features

Feature	Description
1	**Display Function** button, when pressed, allows for reading **Battery Charge** status on the **Digital Display**. Toggles **Digital Display's** power **ON/OFF**.
2	**Output Power (W)** light illuminates (green) when **Output Power** information is displayed on the **Digital Display**.
3	**Battery Charge (%)** light illuminates (green) when **Battery Charge** information is displayed on the **Digital Display**.
4	**Digital Display** displays the inverter's **Output Power** in **W** and **Battery Charge** status in **% FULL**.

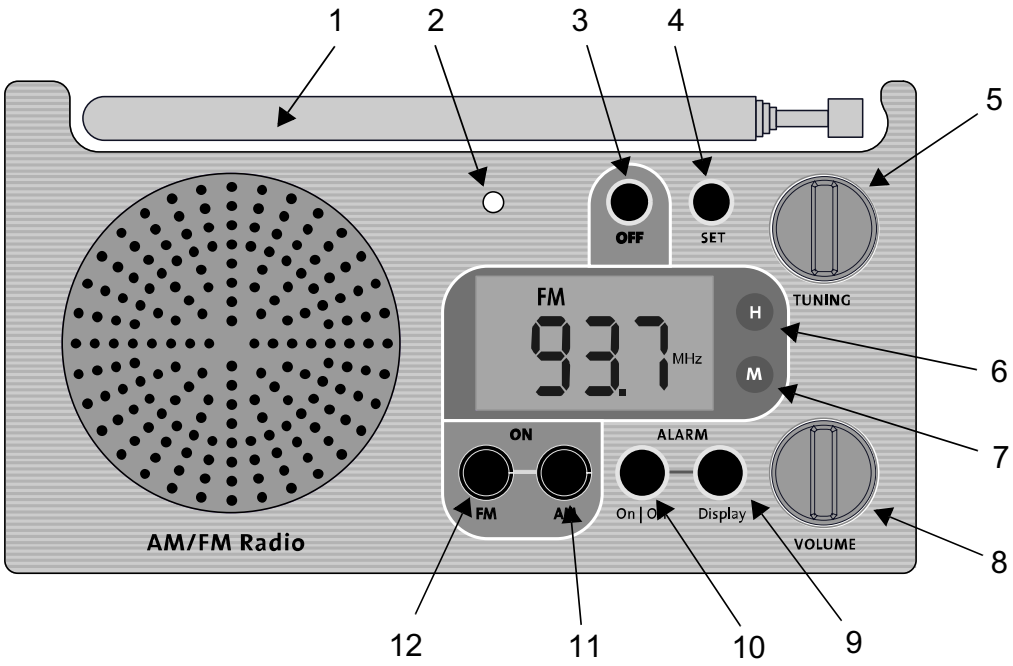
Feature	Description
5	**Charging Status** light illuminates when the XPower Powerpack is in **Charging Status** mode (i.e. **AC Charger** is connected to the inverter's **Charger Input Socket** and plugged into the household 120 V AC outlet).
6	**5 W incandescent light** illuminates for about 50 hours when the battery is fully charged.
7	**3 AC Outlets** are standard 3-prong outlets supplying 120 V AC power for running an AC appliance.
8	**AC Outlet ON/OFF switch** illuminates when the switch is turned on.
Not shown	**Audible Alarm** (inside the unit) sounds in the event of overheating or low battery protection on inverter.

Control Panel Operation

How to...	Required Condition	Required Action	Note
Monitor total AC power consumed by the applications powered from the 3 AC outlets	Inverter's ON/OFF switch is turned ON; **Output Power (W)** light illuminates (green); AC charger is unplugged from the wall AC outlet.	No action required. The digital display will show the AC power drawn from the inverter by the applications powered from the AC outlets.	In order to save the battery power and ensure longer inverter run time, press **Display Function** button to turn off the digital display. Press **Display Function** button again to turn the display on for AC power reading.

How to...	Required Condition	Required Action	Note
Monitor battery charging status	Inverter's ON/OFF switch is turned to OFF; All appliances must be disconnected from the AC and DC power outlets; The ON/OFF switch of the incandescent light must be turned to OFF; The AC charger must be plugged into the charger input socket and also into a household AC outlet.	No action required. A flashing green **Charging Status** light indicates that the battery in the Powerpack needs recharging and that the AC charger is charging the battery. A steady green **Charging Status** light indicates that the battery is fully charged and the Powerpack is ready for use.	Recharging with the supplied AC charger is a true "plug-in-and-forget" charging method. We recommend leaving the AC charger connected when the Powerpack is not in use to permanently maintain the battery in fully charged condition.
Check battery charge status	Inverter's ON/OFF switch is turned to OFF; All appliances must be disconnected from the AC and DC power outlets; The ON/OFF switch of the incandescent light must be turned to OFF; The AC charger must **not** be plugged into the charger input socket.	Push and hold the **Display Function** button. The green **Battery Charge (%)** light will come on and the digital display will show the remaining battery capacity in %.	This function is disabled when the AC charger is plugged in to the charger input socket, or when the inverter switch is ON. For accurate battery charge reading, allow 15 minutes between charging/use and battery capacity check.

AM/FM Radio with Digital Alarm Clock



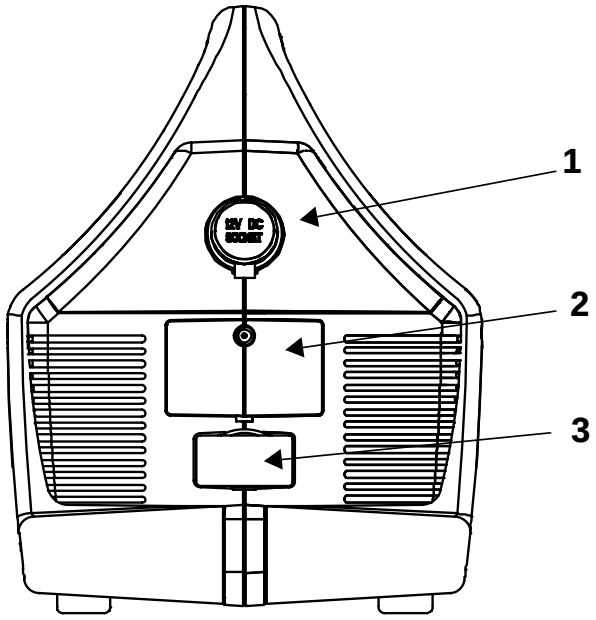
Radio and Clock Features

Feature	Description
1	FM antenna
2	Frequency indicator light
3	Power OFF button
4	Time set button
5	Tuning dial
6	Hours set button
7	Minutes set button
8	Volume dial
9	Alarm set button
10	Alarm clock ON/OFF button
11	AM band button/ON
12	FM band button/ON

Radio and Clock Operation

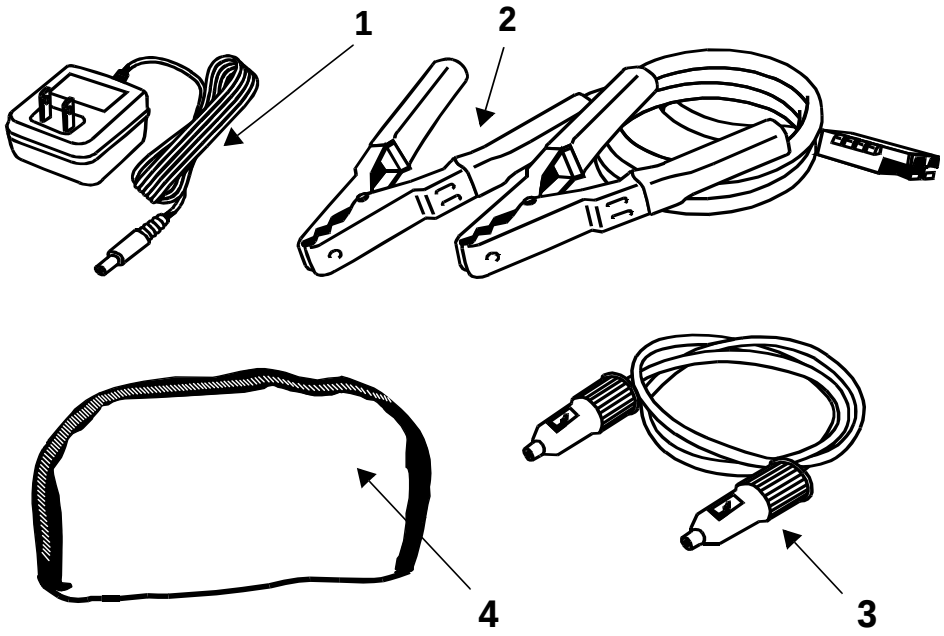
How to...	Required Condition	Required Action	Note
Listen to the radio		Press the AM band button (11) or the FM band button (12). To turn off the radio, press the power OFF button (3).	When radio is on, the station frequency is displayed. When radio is off, the time is displayed.
Set the clock	Turn off the radio to show the time.	To adjust hour, press and hold Time Set button (4), and press hours set button (6). To adjust minutes, press and hold (4), and press minutes set button (7).	The clock uses a 12-hour (AM/PM) time format.
Set the alarm	Turn off the radio to show the time.	To adjust hour, press and hold Alarm Set button (9), and press hours set button (6). To adjust minutes, press and hold (9), and press minutes set button (7).	The alarm clock uses a 12-hour (AM/PM) time format.
Use the alarm clock	Set the alarm, turn off radio to show time.	Press Alarm Clock ON/OFF button (10). "¤" shows on the display screen.	When the alarm clock turns the radio on, the power off button (3) does not work. To turn off the radio, press Alarm Clock ON/OFF (10), then press (3).
Improve reception	Radio tuned to FM station.	Adjust the direction and length of the FM antenna.	N/A.

Left Side View



Feature	Description
1	**DC Power Socket** can: • Power 12 V DC auto, RV or marine appliances • Recharge XPower Powerpack from a 12 V outlet in a vehicle using the DC Charging Cable.
2	**External Replaceable Fuse** is rated at 250 A, 32 V. Located behind fuse cover.
3	**Jump-Start Cable Port** supplies high power DC current. The cables connect to the jump-start cable port when jump-starting a vehicle or when connecting an external battery to the XPower Powerpack. The jump-start cable connection is designed so that the cables cannot be inserted incorrectly into the jump-start cable port.

Accessories



Feature	Description
1	**AC Charger** lets you recharge the XPower Powerpack from a standard AC wall outlet and can only be used to recharge the internal battery of the XPower Powerpack. Can be stored in AC charger compartment.
2	**Detachable heavy-duty jump-start cables**
3	**DC Charging Cable** lets you recharge the XPower Powerpack from a 12 V system in a car, SUV, RV or a boat. This can be stored in the storage compartment.
4	**Accessory bag**

3 Operation

Chapter 3 explains how to operate the XPower Powerpack 600HD efficiently. This chapter covers:

- Recharging the XPower Powerpack for first time use
- Using the built-in light
- Operating AC appliances and 12 V DC appliances
- Jump-starting a vehicle's engine
- Connecting to an external battery for additional run time.

Operating Conditions and Guidelines

CAUTION

Read all operating instructions before operating the XPower Powerpack.

CAUTION

Do not use the XPower Powerpack to operate any AC appliances or 12 V DC appliances while recharging with the AC Charger. The AC Charger may fail if AC appliances or 12 V DC appliances are operated while the AC Charger is connected.

CAUTION

The XPower Powerpack is not intended for use as a UPS (Uninterruptible Power Supply).

Choosing a Location

WARNING: Fire or explosion

The XPower Powerpack contains components that tend to produce arcs or sparks. To prevent fire or explosion, do not operate the XPower Powerpack in compartments containing batteries or flammable materials, or in locations that require ignition-protected equipment.

The XPower Powerpack should be operated only in locations that meet these requirements:

Dry	Do not allow water or other liquids to drop or splash on the XPower Powerpack.
Cool	Ambient air temperature should be between 32 and 104ºF (0 and 40ºC)—the cooler the better within this range.
Ventilated	Leave at least 2" (5 cm) clearance around the XPower Powerpack for air flow. Ensure that the ventilation openings are not obstructed.
Safe	Do not operate the unit in the same compartment as batteries or in any compartment capable of storing flammable liquids like gasoline.
Protected from battery gases	Do not operate the unit where it will be exposed to battery gases. These gases are very corrosive, and prolonged exposure will damage the XPower Powerpack.

Using XPower Powerpack 600HD for the First Time

Important: Prior to operating your AC appliance or 12 V DC appliance, ensure that the battery of the XPower Powerpack is fully charged. If the battery has been fully discharged, recharging with the AC Charger may take up to 35 hours.

Recharging with the AC Charger

Note: The **Battery Charge (%)** reading on the digital display is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.

Recharging with the AC charger is a true "plug-in-and-forget" charging method. We recommend leaving the AC charger connected when the XPower Powerpack is not in use.

To recharge with the AC Charger:

1. Disconnect any 12 V DC appliances and turn the light off.
2. Turn the AC Outlet ON/OFF switch to OFF.
3. Plug the AC Charger into a standard AC wall outlet.
4. Insert the AC Charger cable end into the charger input socket located in the storage compartment of the unit.

The green **Charging Status** light changes from flashing to steady when charging is complete (about 35 hours if the battery is completely discharged).

Important: The 35-hour charging time for the XPower Powerpack assumes that there is 120 V at the AC wall outlet. If the voltage is less than 120 V AC, it may take more than 35 hours to fully recharge the XPower Powerpack. If, after 35 hours of charging, the green **Charging Status** light is still flashing, continue to charge the unit for another 15 hours.

Important: If you keep the XPower Powerpack in storage, the battery will discharge over time. **Remember to recharge the battery every three months to keep the XPower Powerpack operational.**

Note: Once fully charged, the charging current automatically reduces to a maintenance charge mode, and the XPower Powerpack may be left permanently connected to the AC Charger.

Using the Light

The XPower Powerpack has a built-in incandescent light which will operate for about 40 hours before the unit needs to be recharged.

Operating AC Appliances

Understanding AC Appliances

AC appliances are rated by how much electrical power (in watts) they consume. XPower Powerpack can power most appliances within its continuous power rating (480 W, 4 A).

Some appliances may be difficult or impossible to operate from the XPower Powerpack. They may have high surge requirements or should not be run from the XPower Powerpack. See “High Surge Appliances” on page 15 and “Trouble Appliances” on page 16.

Run Time on Typical AC Appliances

Note: The fewer watts an AC appliance uses, the longer the XPower Powerpack will operate before recharging is required.

Typical AC appliances that can be used on the XPower Powerpack are listed in Table 3-1.

Table 3-1 AC Appliances and Run Times

AC-powered Products	Watts[a]	Run time (hours)[b]
Cordless telephone	5	56
Fluorescent work light	14	20
Laptop computer	40	7
Table lamp	40	7
13" colour TV	60	4.5
3/8" drill	190	50 min.

a. Represents actual power consumption as measured on sample products.
b. Operating times assume a fully charged 28 Ah battery and may vary based on model/brand used.

High Surge Appliances

The wattage rating of AC appliances is the average power used by the appliance. Appliances such as televisions, computer monitors and appliances with motors consume much more power than their average rating when they are first switched on.

Although XPower Powerpack can supply momentary surge power up to 960 W, some appliances may exceed the capabilities of the XPower Powerpack and trigger the inverter’s safety overload shutdown circuit.

Trouble Appliances

CAUTION

The output of the inverter is non-sinusoidal. Some equipment may be damaged by the inverter's modified sine wave output (non-sinusoidal).

Some appliances, including the types listed below, may be damaged if they are connected to the inverter:

- Electronics that modulate RF (radio frequency) signals on the AC line will not work and may be damaged.
- Speed controllers found in some fans, power tools, kitchen appliances, and other loads may be damaged.
- Some chargers for small rechargeable batteries can be damaged. See "Precautions for Using Rechargeable Appliances" on page vii for details.
- Metal halide arc (MHI) lights can be damaged.

Note: If you are unsure about powering any device with the inverter, contact the manufacturer of the device.

Operating Several Appliances at Once

You can run several AC appliances if the total rating of all the appliances (in watts) does not exceed 480 W. You can run appliances using an AC power bar.

Run time, however, will decrease accordingly with the number of appliances being operated and the total AC power being consumed.

Operating an AC Appliance

Before operating your AC appliance, ensure that the battery of the XPower Powerpack is fully charged. See “Recharging with the AC Charger” on page 13 for details.

To operate an AC appliance:

1. Turn the AC outlet ON/OFF switch to the ON position.

   The switch illuminates to indicate AC power is available at the AC outlets.

2. Plug the AC appliance into one of the AC outlets and turn the appliance on. XPower Powerpack will operate most devices rated up to 480 W.

3. Recharge the XPower Powerpack as soon as possible after each use.

When using the XPower Powerpack to operate an AC appliance and the low battery warning sounds, the warning gives you time to shut your AC appliance off before loss of AC power.

If you ignore the warning, the XPower Powerpack automatically turns off a few minutes later to prevent battery damage.

In the event of an overload, low battery voltage or overheating, the XPower Powerpack automatically shuts down.

Operating 12 V DC Appliances

The XPower Powerpack can operate 12 V DC auto, RV, marine, or other portable appliances that draw 12 A or less from a 12 V DC power outlet or from a vehicle's lighter socket.

CAUTION: Equipment damage

The DC power socket does not automatically switch off when the internal battery is discharged. To protect the internal battery against damage resulting from total discharge, we recommend that the AC outlet ON/OFF switch is turned ON when using the XPower Powerpack to operate a 12 V DC appliance.
Having the AC outlet ON/OFF switch turned ON enables the alarm to warn you when the 12 V DC appliance has nearly depleted the internal battery.

Note: The fewer watts a 12 V DC appliance draws, the longer the XPower Powerpack will operate before recharging is required.

Typical 12 V DC appliances that can be used on the XPower Powerpack are listed in Table 3-2.

Table 3-2 12 V DC Appliances and Run Times

12 V DC Appliance	Watts[a]	Run Time (Hours)[b]
5 W incandescent light (built into the unit)	5	56
Cellular telephone[c]	6	46
Portable cooler	30	9

a. Represents actual power consumption as measured on sample appliances.
b. Operating times assume a fully charged 28 Ah battery and may vary based on model or brand of appliance.
c. Represents talk time available from 10 recharge cycles.

To operate a 12 V DC appliance:

1. Open the protective cover on the left side of the XPower Powerpack.
2. Plug the 12 V DC appliance into the DC power socket on the left side of the unit, and turn the 12 V DC appliance on (if required).

   If the 12 V DC appliance draws more than 12 A (or has a short-circuit defect), the internal circuit breaker of the XPower Powerpack shuts off the power to the 12 V DC appliance. If this occurs, unplug the 12 V DC appliance, and the internal circuit breaker automatically resets after a few seconds.
3. Fully recharge the XPower Powerpack as soon as possible after each use.

As the DC power socket is internally wired directly to the internal battery, extended operation of a 12 V DC appliance may result in excessive battery discharge. See Caution for “Equipment damage” on page 18.

Jump-Starting a Vehicle's Engine

You can use the XPower Powerpack with the supplied jump-start cables to jump-start a vehicle or boat engine that has a 12 V starting battery.

WARNING: Fire hazard

Never allow red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard. Always disconnect the clamps from the unit after use and clip the plastic guard over the jump-start cable port.

WARNING: Fire hazard

Jump-start cable clamps' connection to the vehicle's battery terminals must be positive to positive (red clamp to battery "+") and negative to negative (black clamp to battery "–"). A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.

WARNING: Risk of explosion, fire or burns

The battery terminals exposed at the jump-start cable port have enough energy present to cause a spark, creating an explosion hazard, or to cause burns if a metal object contacts both terminals. Always clip the plastic guard over the port when not in use.

Important: Closely follow these instructions for jump-starting your vehicle because they may be different from the instructions supplied with other products or jump-start cables.

To jump-start a vehicle or boat engine:

1. Turn OFF the vehicle or boat ignition and all accessories.
2. Engage the park or emergency brake and place the transmission in park for an automatic or neutral for a manual.
3. If jump-starting a boat engine, purge the engine compartment and bilge of all fumes.

4. Connect the cables to the jump-start cable port on the left side of the XPower Powerpack.
5. Position the XPower Powerpack on a flat, stable surface near the battery and away from all moving parts of the engine.
6. Connect the red positive (+) clip of the cables to the positive (+) terminal of the engine battery.

   The battery's positive terminal is usually larger in diameter than the negative terminal. In most vehicles, the battery's positive terminal has a red wire connected to it.
7. Connect the black negative (–) clip of the cables to the engine block, cylinder head, or other stationary heavy metal part of the motor, or to the negative (–) battery terminal.

   Before starting the engine, make sure the XPower Powerpack and the cables are clear of belts and fans. Do not crank the engine for more than 4 seconds.

WARNING: Fire hazard

The jump-start feature is designed for short term operation only—less than 4 seconds. Operating the jump-start feature for more than 4 seconds may cause damage to the unit. Allow the XPower Powerpack to cool down for at least 3 minutes after each jump-start.

8. Remove the red positive (+) clip and then the black negative (–) clip from the vehicle's battery terminal.
9. Remove the cables from the jump-start cable port.

Important: Recharge the XPower Powerpack as soon as possible after each use. See "Recharging the XPower Powerpack 600HD Battery" on page 26.

Using the Radio

For information about operating the radio, see page 7.

Power Draw

The AM/FM radio on the back panel is powered by the internal battery in the XPower Powerpack.

When turned on, the radio draws 30 mA, allowing you to use the radio for more than one month when the XPower Powerpack is fully charged.

Listening to the AM Band

Due to signal interference, you cannot listen to the AM band while using the XPower Powerpack to operate an AC appliance.

Connecting to an External Battery

You can extend battery operating times by connecting the XPower Powerpack to a larger external battery using the jump-start cables.

For example, an external 60 Ah battery gives approximately two times the operating time of the XPower Powerpack internal 28 Ah battery.

WARNING: Fire hazard

Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard. Always disconnect the jump-start cables from the unit after use and clip the plastic guard over the jump-start cable port.

WARNING: Fire hazard

Jump-start cable clamps must be connected positive to positive (red clamp to battery “+”) and negative to negative (black clamp to battery “–”). A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.

WARNING: Acid spills

Use a sealed, non-spillable battery for indoor use. Common auto and marine batteries are not suitable for indoor use unless their fumes are vented outdoors. Common auto and marine batteries contain acid, which is hazardous if spilled. Wear eye protection and protective clothing when connecting the XPower Powerpack to an external battery.

To connect the XPower Powerpack to an external battery using the jump-start cables:

1. Connect the cables to the jump-start cable port on the left side of the XPower Powerpack.
2. Connect the red positive (+) clip of the cables to the red positive (+) terminal of the external battery.
3. Connect the black negative (–) clip of the cables to the black negative (–) terminal of the external battery.

WARNING: Sparking and explosion

Do not remove the cables from the jump-start cable port when the positive and negative clamps are connected to the terminals of the external battery.

To disconnect the cables from an external battery and from the XPower Powerpack:

1. To disconnect the XPower Powerpack from the external battery when the external battery is discharged or no longer needed, remove the red positive (+) clip, and then remove the black negative (–) clip.
2. Remove the cables from the jump-start cable port.
3. Recharge the XPower Powerpack as soon as possible after use.

CAUTION

Do not recharge the XPower Powerpack when an external battery is connected. The AC charger may be damaged.

4 Maintenance

Chapter 4 provides information on maintaining your internal battery, recharging options for the internal battery, and replacing user-replaceable parts.

Routine maintenance is required to keep your XPower Powerpack 600HD operating properly. Occasionally clean the exterior of the unit with a damp cloth to remove the accumulated dust and dirt.

WARNING: Shock hazard

Disconnect all sources of AC power and DC power before performing any type of maintenance.

Battery Maintenance

All rechargeable batteries gradually discharge when left standing, and you need to recharge them periodically to maintain maximum battery capacity. The AC charger supplied with the XPower Powerpack is designed to regulate the charging process, ensuring that the battery is always fully charged but never overcharged. To ensure safe recharging and maximum battery life, recharge the XPower Powerpack only with the supplied charger or approved battery chargers.

CAUTION

Due to inherent self-discharge, **lead acid batteries must be charged at least every 3 months**, especially in a warm environment. Leaving a battery in a discharged state, or not recharging every 3 months, may result in permanent battery damage and poor jump-starting performance.

CAUTION

Do not attempt to recharge the XPower Powerpack battery if it is frozen. Gradually warm the frozen battery to 32 °F (0 °C) before recharging.

Recharging the XPower Powerpack 600HD Battery

To check the battery's charge level, press the **Display Function** button.

Note: **Battery Charge (%)** status is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.

You can recharge the battery using:

- the fully automatic "plug-in-and-forget" AC charger.
- the DC charging cable to recharge from your vehicle as you drive.
- a generator equipped with a regulated 12 V battery charging outlet.
- a solar panel.

Recharging with the AC Charger

Recharging with the AC charger is a true “plug-in-and-forget” charging method.

CAUTION

Do not operate AC or DC appliances while the XPower Powerpack is being recharged with the AC charger.
The AC charger may be permanently damaged if AC appliances or 12 V DC appliances are operated while the AC charger is connected.

To recharge with the AC charger:

1. Disconnect any 12 V DC appliance and turn the light switch to OFF.
2. Turn the AC outlet ON/OFF switch to OFF.
3. Plug the AC charger into a standard AC wall outlet.
4. Insert the AC charger cable end into the charger input socket located on the left side of the XPower Powerpack.
5. While the XPower Powerpack is recharging, the green **Charging Status** light is flashing. If the battery is completely discharged, a typical recharge may take up to 35 hours. When fully charged, the green **Charging Status** light changes to steady and the XPower Powerpack is ready to use.

Important: The 35-hour charging time for the XPower Powerpack assumes that there is 120 V at the AC wall outlet. If the voltage is less than 120 V AC, it may take more than 35 hours to fully recharge the XPower Powerpack. If, after 35 hours of charging, the green **Charging Status** light is still flashing and not steady, continue to charge the unit for another 15 hours.

Once the battery is fully charged, the charging voltage and current automatically reduces to a maintenance level and the XPower Powerpack may be left permanently connected to the AC charger. If your utility power is interrupted, the charging process automatically restarts when power returns.

Recharging with the DC Charging Cable

Using the DC charging cable, the XPower Powerpack can be recharged while you drive your vehicle.

Important: Although the charge regulation circuitry in the XPower Powerpack does not operate with this charging method, most vehicle voltage regulators will ensure that the XPower Powerpack is not overcharged.

WARNING: Fire and explosion hazard

Do not use this recharging method if your vehicle has abnormally high voltage electrical systems that operate above 15 V DC. This may lead to accumulations of hydrogen, causing exposure to fire and explosion hazard.

CAUTION

Do not operate AC or DC appliances while the XPower Powerpack is being recharged with the DC charging cable from your vehicle.

To recharge the XPower Powerpack while you drive using the DC charging cable:

1. While the vehicle engine is running, plug one end of the DC charging cable into the DC power socket of the XPower Powerpack.
2. Plug the opposite end of the DC charging cable into the vehicle's lighter socket or 12 V accessory outlet.
3. Once the XPower Powerpack is fully charged or if your vehicle's engine is not running, disconnect the DC charging cable from both sockets.

   Most of the capacity will be restored in four hours while the vehicle engine is running.

Note: The green **Charging Status** light will not illuminate when the XPower Powerpack is recharged through the DC charging cable.

Note: **Battery Charge (%)** indicator is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.

Important: Do not leave the XPower Powerpack permanently connected to the vehicle's lighter socket or 12 V accessory outlet.

Recharging with a Generator's Regulated 12 V DC Outlet

WARNING: Fire and explosion hazard

The generator output must be intended for battery charging and have an output of 15 V or less. An unregulated output or one that exceeds 15 V DC can damage the battery.
This may lead to accumulations of hydrogen, causing exposure to fire and explosion hazard.

Refer to the Owner's Guide accompanying your generator for detailed instructions on connecting the generator to a unit like the XPower Powerpack.

You can recharge the battery of the XPower Powerpack using a generator in several ways:

- Using the AC charger to recharge the XPower Powerpack from a generator is possible, but would require extended generator running time.
- Using a generator which has an auxiliary regulated 12 V DC output designed for charging 12 V batteries. Most generators are equipped with them. Use this power source for faster charging.
- Using a generator with a regulated 12 V DC lighter socket. Follow the connection instructions in "Recharging with the DC Charging Cable" on page 28.

Most of the capacity will be recharged in a few hours.

Note: **Battery Charge (%)** indicator is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.

Recharging From a Solar Panel

Small, unregulated 12 V solar panels rated to produce a maximum of 2.5 A (or 30 W) can be used to charge the XPower Powerpack through the AC charger input socket.

You will need to purchase a standard 5.5 mm OD × 2.5 mm ID (0.217" × 0.10") coaxial DC (barrel type centre positive) connector to mate with the AC charger input socket. These connectors are available at consumer electronics stores.

To wire the coaxial DC connector:

1. Connect the solar panel's red positive (+) wire to the coaxial plug's inner or centre contact.
2. Connect the solar panel's black negative (–) wire to the plug's outer contact. See Figure 4-1.

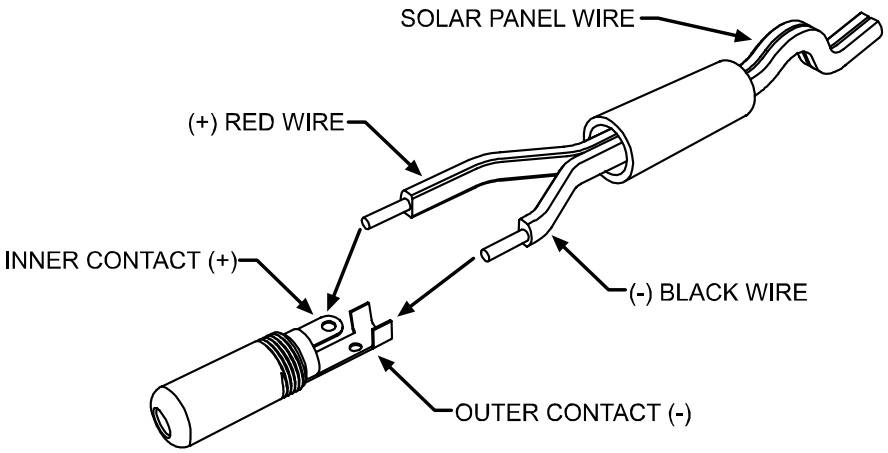


Figure 4-1 Typical DC Coaxial Connector Connection

Once the connector is inserted into the AC charger input socket and the solar panel is placed in the sun, the XPower Powerpack charges automatically just as with the AC charger. See "Recharging with the AC Charger" on page 27.

It takes about ten hours in direct sunlight to recharge the XPower Powerpack from a 2.5 A solar panel.

Replacing the Incandescent Light

To replace the light bulb:

1. Turn the light switch off.
2. Pop out the plastic lens cover.
3. Gently grasp the bulb and twist clockwise to unscrew the bulb.
4. Insert a replacement bulb of the same type and rating into the light reflector assembly.
5. Gently grasp the bulb and twist counter-clockwise to screw the bulb in.
6. Snap in the lens cover.

Replacing the External Fuse

The replacement fuse must be rated at 250 A, 32 V DC. See page 9 for the fuse location.

To replace the external fuse:

1. Remove the fuse cover.
2. Unscrew the two bolts on the fuse.
3. Replace the fuse. Ensure that the replacement fuse is rated at 250 A, 32 V DC and is of the same type.
4. Tighten the fuse with the two bolts.
5. Replace the fuse cover.

5 Troubleshooting

Troubleshooting will help you identify the common problems than can occur with the XPower Powerpack 600HD.

Read this chapter before calling Customer Service.

If you cannot solve the problem with the XPower Powerpack, record the information asked for on “Information About Your System” on page 48 and then call Customer Service.

Common Problems

Buzz in Audio Equipment

Some inexpensive stereo systems have inadequate internal power-supply filtering and may buzz slightly when powered by the XPower Powerpack. The best solution to eliminate the buzzing is to use an audio system with a good quality filter.

Television Interference

The XPower Powerpack is shielded to minimize interference with TV signals. If TV signals are weak, you may see interference in the form of lines scrolling across the TV screen. Try one of the following suggestions to minimize or eliminate the interference:

- Use an extension cord to increase the distance between the XPower Powerpack and the TV, antenna, and cables.
- Adjust the orientation of the XPower Powerpack, television, antenna, and cables.
- Maximize TV signal strength by using a better antenna. Use a shielded antenna cable where possible.

- Try a different TV. Different models vary considerably in their susceptibility to interference.

Troubleshooting Reference

WARNING: Electric shock hazard

Do not remove the cover of the XPower Powerpack or disassemble the XPower Powerpack except to replace the internal battery or 250 A fuse. The XPower Powerpack does not contain any internal user-serviceable parts and attempting to service the unit yourself could result in electrical shock or burn.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
AC appliance will not operate; audible alarm is not sounding.	AC appliance rated more than 480 W, the safety overload has tripped.	Use an AC appliance with a power rating less than 480 W.
	AC appliance is rated less than 480 W, high starting surge has tripped the safety overload.	AC appliance may exceed the unit's surge capability. Use an AC appliance with a starting surge within the XPower Powerpack surge rating.
Overload shutdown	Appliance power requirements exceed the capability of the XPower Powerpack.	Unplug the appliance and confirm that the appliance's power requirement is 480 W or less before attempting to restart the appliance.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
AC appliance will not operate; audible alarm is sounding.	Battery has discharged to 10.5 V.	Turn the AC outlet ON/OFF switch off and recharge the XPower Powerpack.
	Inverter has overheated due to poor ventilation or excessively warm environmental conditions.	Turn the AC outlet ON/OFF switch off and allow the XPower Powerpack to cool for 15 minutes or more. Clear blocked fan opening or remove objects covering the unit, then restart the XPower Powerpack. Move to a cooler environment.
Over-temperature shutdown	Inverter has overheated due to poor ventilation or excessively warm environmental conditions.	Turn off the AC outlet ON/OFF switch, and let the XPower Powerpack cool down.
Alarm sounds	Internal battery is nearly discharged. (11.0 V). If you ignore this warning, the XPower Powerpack automatically switches off when the battery reaches 10.5 V.	Turn the AC outlet ON/OFF switch OFF and recharge the XPower Powerpack.
Run time is less than expected.	Internal battery is not fully charged.	Recharge using the AC charger, until green **Charging Status** light is steady.
	AC appliance power consumption is higher than expected.	Check AC appliance power or wattage rating (or current draw for 12 V DC appliances) and compare with Table 3-1 on page 15 and Table 3-2 on page 18.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Measured AC output voltage is too low.	Use of an average-reading AC voltmeter to read output voltage.	The modified sine wave (MSW) output of the XPower Powerpack requires a true RMS reading meter, such as the Fluke 87 series, for accurate measurement.
	Battery is almost fully discharged.	Press display function button to verify battery status and recharge the XPower Powerpack as necessary. "Battery Charge %" reading on the digital display is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.
Charging Status light is OFF when AC charger is connected	No AC power at the AC wall outlet.	Ensure power is available at the AC wall outlet.
	AC charger is faulty.	Replace the AC charger.
Green **Charging Status** light is flashing (indicating recharging) and battery charge (%) does not turn on.	Battery charge (%) reading on digital display is only accurate when the XPower Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.	Unplug the charging sources and any appliances and let the XPower Powerpack rest for 15 minutes to obtain an accurate reading.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Green **Charging Status** light is still flashing and hasn't changed to steady after 50 hours of charging.	The voltage at the AC wall outlet is less than 120 V AC.	Use AC wall outlet that supplies 120 V AC.
The engine being jump-started will not start.	XPower Powerpack battery is not fully charged.	Recharge the XPower Powerpack battery.
	The engine condition is poor.	Have the engine serviced.
	External fuse (250 A) is blown.	Replace 250 A, 32 V fuse with same type and ratings.
	The engine start capacity exceeds the XPower Powerpack jump-start capability.	Upgrade to a higher power XPower Powerpack.
The battery clamps of the jump-start cables measure zero volts.	External fuse (250 A) is blown.	Replace 250 A, 32 V fuse with same type and ratings.
The light does not turn on.	Light bulb has burnt out.	Remove lens cover and replace bulb with one of the same type and rating.
The AM radio does not work or buzzes continuously	The XPower Powerpack AC outlets are being used, causing interference.	Turn off the AC outlets.

A Specifications

Electrical Specifications

12 V DC Section	
Internal battery type	sealed, AGM (Absorbed Glass Mat) lead acid
Internal battery voltage (nominal)	12 V DC
Internal battery capacity (minimum)	28 Ah
Internal battery CCA rating	280 CCA
DC power socket (maximum continuous load)	12 A with automatic reset
Built-in incandescent light (replaceable)	5 W bulb
Jump-start cable port	50 A
Jump-start fuse (external—user replaceable, replacement part # 066-0191)	250 A

AC Power Section	
Output power • Continuous output power • Five minute AC output power • AC output surge capacity	 480 W 600 W 960 W
Output voltage	115 ± 10 V AC RMS
Output frequency	60 Hz ± 1 Hz
Output wave form	modified sinewave
No load current draw	<0.4 A DC
Input voltage range	10.5 to 15.5 V DC
Low battery alarm	11.0 V DC
Low battery shutdown	10.5 V DC
High battery voltage shutdown	Yes, automatic reset
Over temperature shutdown	Yes, automatic reset
Overload shutdown	Yes, automatic reset
AC output short circuit protection	Yes, automatic reset
Fuse (internal)	2 × 40 A
Operating temperature range	32–104 ºF (0–40 ºC)
Storage temperature range	32–86 ºF (0–30 ºC)

Internal Battery Charging Controller System	
AC charger bulk charging current	1.0 A
Peak charging voltage (nominal)	14.2 V
Charge restart voltage (nominal)	12.9 V
Float charge after full charge is completed (nominal)	1 mA
AC charger input socket maximum current	2.5 A

Radio	
AM Frequency	526–1606 KHz
FM Frequency	87–105 MHz

Accessories	
Jump-start cables (replacement part # 449-0207-01-01)	24" (0.61 m), 6 AWG wire with black and red battery clamps
DC charge cable (replacement part # 449-0187-01-01)	39" (1 m) 18 AWG with male-to-male lighter plugs
AC charger (replacement part # 074-1004-01)	120 V AC, 1 A, 60 Hz

Physical Specifications

Depth	9 ¼" (23.5 cm)
Width	14" (35.6 cm)
Height	12" (30.5 cm)
Weight	29 lb (13.2 kg)

Important: All specifications are subject to change without notice.

Warranty and Return Information

Warranty

What does this warranty cover? This Limited Warranty is provided by Xantrex Technology Inc. ("Xantrex") and covers defects in workmanship and materials in your XPower Powerpack 600HD. This warranty period lasts for 6 months from the date of purchase at the point of sale to you, the original end user customer. You require proof of purchase to make warranty claims.

What will Xantrex do? Xantrex will, at its option, repair or replace the defective product free of charge, provided that you notify Xantrex of the product defect within the Warranty Period, and provided that Xantrex through inspection establishes the existence of such a defect and that it is covered by this Limited Warranty.

Xantrex will, at its option, use new and/or reconditioned parts in performing warranty repair and building replacement products. Xantrex reserves the right to use parts or products of original or improved design in the repair or replacement. If Xantrex repairs or replaces a product, its warranty continues for the remaining portion of the original Warranty Period or 90 days from the date of the return shipment to the customer, whichever is greater. All replaced products and all parts removed from repaired products become the property of Xantrex.

Xantrex covers both parts and labor necessary to repair the product, and return shipment to the customer via a Xantrex-selected non-expedited surface freight within the contiguous United States and Canada. Alaska and Hawaii are excluded. Contact Xantrex Customer Service for details on freight policy for return shipments outside of the contiguous United States and Canada.

How do you get service? If your product requires troubleshooting or warranty service, contact your merchant. If you are unable to contact your merchant, or the merchant is unable to provide service, contact Xantrex directly at:

Telephone:	1 800 394 0440 (toll free North America) 1 360 925 5097 (direct)
Fax:	1 800 994 7828 (toll free North America) 1 360 925 5143 (direct)
Email:	customerservice@xantrex.com

Direct returns may be performed according to the Xantrex Return Material Authorization Policy described in your product manual. For some products, Xantrex maintains a network of regional Authorized Service Centers. Call Xantrex or check our website to see if your product can be repaired at one of these facilities.

What proof of purchase is required? In any warranty claim, dated proof of purchase must accompany the product and the product must not have been disassembled or modified without prior written authorization by Xantrex.

Proof of purchase may be in any one of the following forms:

- The dated purchase receipt from the original purchase of the product at point of sale to the end user, or
- The dated dealer invoice or purchase receipt showing original equipment manufacturer (OEM) status, or
- The dated invoice or purchase receipt showing the product exchanged under warranty

What does this warranty not cover? This Limited Warranty does not cover normal wear and tear of the product or costs related to the removal, installation, or troubleshooting of the customer's electrical systems. This warranty does not apply to and Xantrex will not be responsible for any defect in or damage to:

a) the product if it has been misused, neglected, improperly installed, physically damaged or altered, either internally or externally, or damaged from improper use or use in an unsuitable environment;
b) the product if it has been subjected to fire, water, generalized corrosion, biological infestations, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the Xantrex product specifications including high input voltage from generators and lightning strikes;
c) the product if repairs have been done to it other than by Xantrex or its authorized service centers (hereafter "ASCs");
d) the product if it is used as a component part of a product expressly warranted by another manufacturer;
e) the product if its original identification (trade-mark, serial number) markings have been defaced, altered, or removed.

Disclaimer

Product

THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY XANTREX IN CONNECTION WITH YOUR XANTREX PRODUCT AND IS, WHERE PERMITTED BY LAW, IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS, GUARANTEES, REPRESENTATIONS, OBLIGATIONS AND LIABILITIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE IN CONNECTION WITH THE PRODUCT, HOWEVER ARISING (WHETHER BY CONTRACT, TORT, NEGLIGENCE, PRINCIPLES OF MANUFACTURER'S LIABILITY, OPERATION OF LAW, CONDUCT, STATEMENT OR OTHERWISE), INCLUDING WITHOUT RESTRICTION ANY IMPLIED WARRANTY OR CONDITION OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT REQUIRED UNDER APPLICABLE LAW TO APPLY TO THE PRODUCT SHALL BE LIMITED IN DURATION TO THE PERIOD STIPULATED UNDER THIS LIMITED WARRANTY.

IN NO EVENT WILL XANTREX BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, COSTS OR EXPENSES HOWEVER ARISING WHETHER IN CONTRACT OR TORT INCLUDING WITHOUT RESTRICTION ANY ECONOMIC LOSSES OF ANY KIND, ANY LOSS OR DAMAGE TO PROPERTY, ANY PERSONAL INJURY, ANY DAMAGE OR INJURY ARISING FROM OR AS A RESULT OF MISUSE OR ABUSE, OR THE INCORRECT INSTALLATION, INTEGRATION OR OPERATION OF THE PRODUCT.

Exclusions

If this product is a consumer product, federal law does not allow an exclusion of implied warranties. To the extent you are entitled to implied warranties under federal law, to the extent permitted by applicable law they are limited to the duration of this Limited Warranty. Some states and provinces do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you. This Limited Warranty gives you specific legal rights. You may have other rights which may vary from state to state or province to province.

Warning: Limitations On Use

Please refer to your product manual for limitations on uses of the product.

SPECIFICALLY, PLEASE NOTE THAT THE XPOWER POWERPACK 600HD SHOULD NOT BE USED IN CONNECTION WITH LIFE SUPPORT SYSTEMS OR OTHER MEDICAL EQUIPMENT OR DEVICES. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, XANTREX MAKES NO REPRESENTATIONS OR WARRANTIES REGARDING THE USE OF THE XANTREX XPOWER POWERPACK 600HD IN CONNECTION WITH LIFE SUPPORT SYSTEMS OR OTHER MEDICAL EQUIPMENT OR DEVICES.

Please note that the XPower Powerpack 600HD is not intended for use as an uninterruptible power supply and Xantrex makes no warranty or representation in connection with any use of the product for such purposes.

Return Material Authorization Policy

Before returning a product directly to Xantrex you must obtain a Return Material Authorization (RMA) number and the correct factory "Ship To" address. Products must also be shipped prepaid. Product shipments will be refused and returned at your expense if they are unauthorized, returned without an RMA number clearly marked on the outside of the shipping box, if they are shipped collect, or if they are shipped to the wrong location.

When you contact Xantrex to obtain service, please have your instruction manual ready for reference and be prepared to supply:

- The serial number of your product
- Information about the installation and use of the unit
- Information about the failure and/or reason for the return
- A copy of your dated proof of purchase

Record these details in “Information About Your System” on page 48.

Return Procedure

1. Package the unit safely, preferably using the original box and packing materials. Please ensure that your product is shipped fully insured in the original packaging or equivalent. This warranty will not apply where the product is damaged due to improper packaging.
2. Include the following:
   - The RMA number supplied by Xantrex Technology Inc. clearly marked on the outside of the box.
   - A return address where the unit can be shipped. Post office boxes are not acceptable.
   - A contact telephone number where you can be reached during work hours.
   - A brief description of the problem.
3. Ship the unit prepaid to the address provided by your Xantrex customer service representative.

If you are returning a product from outside of the USA or Canada In addition to the above, you MUST include return freight funds and are fully responsible for all documents, duties, tariffs, and deposits.

If you are returning a product to a Xantrex Authorized Service Center (ASC) A Xantrex return material authorization (RMA) number is not required. However, you must contact the ASC prior to returning the product or presenting the unit to verify any return procedures that may apply to that particular facility.

Out of Warranty Service

If the warranty period for your XPower Powerpack 600HD has expired, if the unit was damaged by misuse or incorrect installation, if other conditions of the warranty have not been met, or if no dated proof of purchase is available, your unit may be serviced or replaced for a flat fee.

To return your XPower Powerpack 600HD for out of warranty service, contact Xantrex Customer Service for a Return Material Authorization (RMA) number and follow the other steps outlined in “Return Procedure” on page 46.

Payment options such as credit card or money order will be explained by the Customer Service Representative. In cases where the minimum flat fee does not apply, as with incomplete units or units with excessive damage, an additional fee will be charged. If applicable, you will be contacted by Customer Service once your unit has been received.

Information About Your System

As soon as you open your XPower Powerpack 600HD package, record the following information and be sure to keep your proof of purchase.

- ❒ Serial Number _____
- ❒ Purchased From _____
- ❒ Purchase Date _____

If you need to contact Customer Service, please record the following details before calling. This information will help our representatives give you better service.

- ❒ Warning, Error or Panel Fault Message _____
- ❒ Appliances operating when problem occurred _____
- ❒ Description of problem _____

_____

_____

xantrex

t 1-800-394-0440 (toll free in North America)
1-360-925-5097 (direct)
f 1-360-925-5143
e CustomerService@xantrex.com

www.xantrex.com

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ATTENTION! CHARGE BEFORE USE

CHARGE FOR AT LEAST 48 HOURS IMMEDIATELY AFTER PURCHASE.

RECHARGE AFTER EACH USE AND ONCE EVERY 3 MONTHS.

FOR DETAILED INSTRUCTIONS, READ THE MANUAL.

ATTENTION: When Operating the Radio and AC loads at the same time, you may experience static in the reception of both AM and FM bands. For clear reception, operate the Radio independent of any AC loads.